

REMARKS

Status of the Claims

Claims 1-26 are pending in the subject application. Claims 8-26 are withdrawn. Claim 2 is canceled. New claim 27 is added. Thus, upon entry of this amendment, claims 1, 3-7 and 27 will be under examination. New claim 27 recites “a continuous zone”, which is supported for example by the Figures and is also inherently supported by the masking technique described in the Examples and elsewhere in the specification. New claim 27 also recites “hydrophobic” and “hydrophilic” functional groups, which is supported for example by the last paragraph of the Summary of the Invention. Thus, no new matter has been added.

Rejoinder of the withdrawn claims is expressly requested.

Summary of the Interview

Applicants would like to thank the examiners for extending to them the courtesy of conducting an interview on December 16, 2010. During the interview, applicants distinguished the claimed invention from O’Gara and various alternative claim language was discussed to more clearly distinguish O’Gara, though Applicants noted its belief that at least claim 1 is patentable as it was pending at the time of the interview.

Claim Rejections Under 35 U.S.C. § 102

Claims 1, 4-5 and 7 are rejected under 35 U.S.C. §102(b) as allegedly being anticipated by US Patent No. 6,528,167 (“O’Gara”). Applicants respectfully disagree.

Independent claim 1 recites “nanoscale or mesoscopic particles”, which terms are defined in the specification. The particle surface is divided into two zones Z1 and Z2 with different functional groups F1 and F2. Accordingly, these particles have at least two distinct zones, never overlapping each other.

In contrast, O’Gara describes porous inorganic/organic hybrid particles. However, O’Gara never discloses or suggests that the surface of the particles exhibit distinct zones with each zone bearing a specific functional group different from the group grafted on the other zone.

Applicants respectfully submit that according to the disclosure of O’Gara, the Si-OH groups that remain unmodified are inter-mixed with the Si-OH groups that are functionalized. This random distribution of functional groups would not create distinct “zones”, as this term would be understood by one of ordinary skill in the art in view of the specification.

The ordinary meaning of “zone” is “any continuous tract or area that differs in some respect, or is distinguished for some purpose, from adjoining tracts or areas, or within which certain distinctive circumstances exist or are established.” See, e.g., www.dictionary.com (emphasis added). The concept that a “zone” includes a continuous area requires any reasonable construction of that term to exclude the particles disclosed in O’Gara, which contain randomly distributed functional groups. In addition, the specification reinforces such a definition by describing, for example, a preferred embodiment in which the zones are created by masking a substantial portion of the surface area of a particle using a nodule of polystyrene. The result is shown in Figure 5, in which substantially more than 5% of the surface area consists of a distinct region containing gold nanoparticles. To further emphasize the “zone” concept of the claimed invention, claim 1, as currently amended, states that the surface area of each zone represents at least 5% of the total surface area of a particle.

In sum, Applicants submit that no reasonable construction of the term “zone” in claim 1 would encompass the particles disclosed in O’Gara. Therefore, for at least these reasons O’Gara does not anticipate any of the pending claims, and Applicants respectfully request that this rejection be withdrawn.

Claim Rejections Under 35 U.S.C. § 103

Claims 2-3 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over US Patent No. 6,528,167 by O’Gara. Applicants respectfully disagree for at least those reasons provided above.

Claims 1 and 6 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over US Patent Pub. No. 2003/0031438 (“Kambe”). Like O’Gara, to the extent that Kambe discloses different groups on the surface of a particle, these different groups are randomly distributed on

the surface, not clumped together in discrete “zones”, as this term is reasonably construed. Thus, Kambe fails to anticipate or render obvious any of the pending claims.

Conclusion

For at least the reasons noted above, the art of record does not disclose or suggest the claimed invention. In view of the foregoing amendments and remarks, reconsideration of the claims and allowance of the subject application is earnestly solicited. **Furthermore, rejoinder of the withdrawn claims is expressly requested.**

If there are any questions relating to this response or the application, it would be appreciated if the Examiner would telephone the undersigned attorney.

If necessary for a timely response, this paper should be considered as a petition for an Extension of Time. Please charge any deficiency in fees or credit any overpayments to Deposit Account No. 13-2725 (Docket # 70206.0043FPWO).

Respectfully submitted,

Dated: 20 December 2010

/W. David Wallace/
W. David Wallace
Registration No. 42,210

Merchant & Gould PC
225 Reinekers Lane
Suite 560
Alexandria, VA 22314
202.326.0300

